

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001111**Date Inspected:** 22-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC- Zhang Zhong**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Dimensional Inspection of Floor Beams**Summary of Items Observed:**

Bay 1 operations: The Caltrans Quality Assurance (QA) Representative, John P. Tracy, had the following list of activities to report:

Submerged Arc Weld (SAW) gantry welder is inactive. No thermal operations were observed by the Caltrans representative.

Bay 2 operations: The Caltrans QA representative observed the following list of activities:

SA215 doubler plate to MA38 for MUB-MA21 B/J weld#'s 1, 2, 3, 4, 5 and 6 is completed.

SA214 doubler plate to MA21 for MUB-MA21 C/J Weld#'s 1, 2, 3, 4, 5, 6, 7 and 8 is completed.

89m-MUSB-MA22 and 89m-MUSB-MA23 have cross bracing being installed and tack welded via Shielded Metal Arc Weld (SMAW) process.

77m mock up is being tack welded. No fit-up observations were noted.

SAW operations are ongoing for the 114m mock-up lower section on MUC-MA107 B/C-3A. No parameters observed.

ZPMC Quality Control (QC) inspectors performed Dry Magnetic Particle Testing (DMT) and Ultrasonic Testing (UT) on the internal splice plates for the 114m mock-up.

Bay 3 operations: The Caltrans QA representative observed the following list of activities:

Plate number PL87A was being DMT, again. ZPMC noted additional indications and a mechanical grinder was used to remove the indications in conjunction with DMT.

Bay 7 operations: The Caltrans QA representative observed the following list of activities:

WELDING INSPECTION REPORT

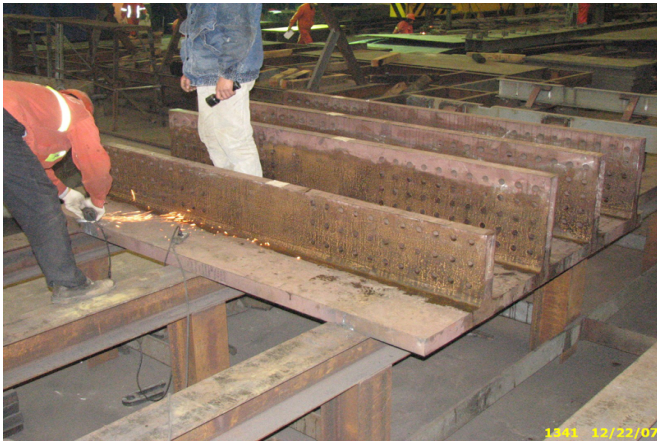
(Continued Page 2 of 3)

Dimensional verifications took place for plates FB001-03-021 and FB001-02-026. Stiffeners were tacked into position and the tacks were ground. Per ZPMC Certified Welding Inspector (CWI), Zhang Zhong, and the Orthotropic Box Girder (OBG) Dimensional Control Plan (DCP) the dimensional tolerance for this operation is ± 2 mm. There was an issue noted by the Caltrans QA representative.

Stiffeners are being installed onto the plates. At the intersection where a stiffener crosses or meets a weld joint a cope or access hole is cut. The approximate size of the hole is 15mm. Welders are being expected to make a sound weld in this area with Flux Core Arc Weld (FCAW) process. Since the size of the welding tip is larger than the access hole, a proper position cannot be achieved.

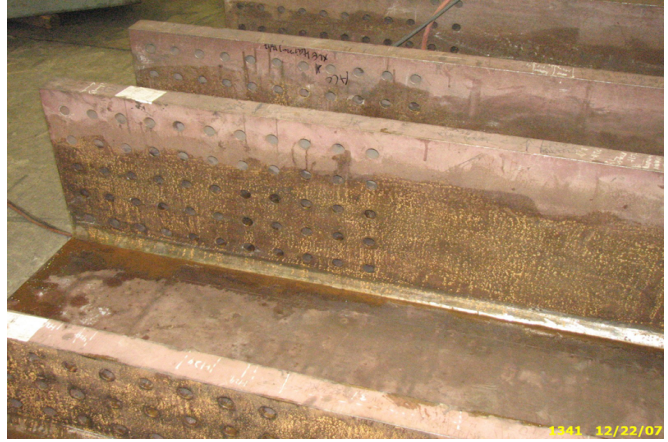
Electrode Storage Room- The consumable electrode issue logs are still completely written in Chinese characters and after several attempts to rectify them. Temperatures appear to be within parameters for storage. No drying temperatures have been observed.

Included below are digital pictures that support the observations recorded within this report.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

At the completion of the above stated dimensional inspections the ZPMC CWI, Zhang Zhong, reported that the measurements were found to be in accordance with the criteria set forth within the contractual documents.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Tracy,John	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
